

**MAS, LLC  
PLM ANALYSIS**

**Proj#-Spl#** M70484 - 001ISO **Analyst** Paul Hess **Date** 6/17/2019  
**ClientName** Simon Greenstone Panatier Bartlett **ClientSpl** SGP 487779  
**Location** \_\_\_\_\_  
**Type\_Mat** Johnson & Johnson Baby Powder 15oz  
**Gross** Off-white powder **% of Sample** 100  
**Visual** \_\_\_\_\_  
\_\_\_\_\_

**OPTICAL DATA FOR ASBESTOS IDENTIFICATION**

<b>Morphology</b>			
<b>Pleochroism</b>			
<b>Refract Index</b>			
<b>Sign^</b>			
<b>Extinction</b>			
<b>Birefringence</b>			
<b>Melt</b>			
<b>Fiber Name</b>			

**ASBESTOS MINERALS**

**EST. VOL. %**  
NO ASBESTOS OBSERVED

**Chrysotile**.....  
**Amosite**.....  
**Crocidolite**.....  
**Tremolite/Actinolite**.....  
**Anthophyllite**.....

**OTHER FIBROUS COMPONENTS**

**Talc -B/Y DS in 1.55** **\*\*\***  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**NON FIBROUS COMPONENTS**

**Opagues** **X**  
**Talc** **X**  
**Mineral grains** **X**  
\_\_\_\_\_  
\_\_\_\_\_

**Binder Description** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Comments** X = Materials detected. \*\*\* Abundant Fibrous Talc observed.  
\_\_\_\_\_  
\_\_\_\_\_

The method detection limit is 1% unless otherwise stated.

**MAS, LLC  
PLM ANALYSIS**

**Proj#-Spl#** M70484 - 001BL **Analyst** Paul Hess **Date** 6/19/2019  
**ClientName** Simon Greenstone Panatier Bartlett **ClientSpl** SGP 487779  
**Location** \_\_\_\_\_  
**Type\_Mat** Johnson & Johnson Baby Powder 15oz  
**Gross** Off-white debris on slide **% of Sample** 100  
**Visual** \_\_\_\_\_  
 \_\_\_\_\_

**OPTICAL DATA FOR ASBESTOS IDENTIFICATION**

<b>Morphology</b>			
<b>Pleochroism</b>			
<b>Refract Index</b>			
<b>Sign^</b>			
<b>Extinction</b>			
<b>Birefringence</b>			
<b>Melt</b>			
<b>Fiber Name</b>			

**ASBESTOS MINERALS**

**EST. VOL. %**  
NO ASBESTOS OBSERVED

**Chrysotile**.....  
**Amosite**.....  
**Crocidolite**.....  
**Tremolite/Actinolite**.....  
**Anthophyllite**.....

**OTHER FIBROUS COMPONENTS**

**Talc -B/Y DS in 1.55** **\*\*\***  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**NON FIBROUS COMPONENTS**

\_\_\_\_\_ **Opaques** \_\_\_\_\_ **X**  
 \_\_\_\_\_ **Talc** \_\_\_\_\_ **X**  
 \_\_\_\_\_ **Mineral grains** \_\_\_\_\_ **X**  
 \_\_\_\_\_

**Binder Description** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Comments** X = Materials detected. \*\*\* Modereate amount of Fibrous Talc observed.  
 \_\_\_\_\_  
 \_\_\_\_\_

The method detection limit is 1% unless otherwise stated.

**MAS, LLC  
PLM ANALYSIS**

**Proj#-Spl#** M70484 - 001HLM **Analyst** Paul Hess **Date** 2/21/2020  
**ClientName** Simon Greenstone Panatier Bartlett **ClientSpl** SGP 487779  
**Location** \_\_\_\_\_  
**Type\_Mat** Johnson & Johnson Baby Powder 15oz  
**Gross** White debris on filter **% of Sample** 100  
**Visual** \_\_\_\_\_

**OPTICAL DATA FOR ASBESTOS IDENTIFICATION**

<b>Morphology</b>	<u>wavy</u>		
<b>Pleochroism</b>	<u>none</u>		
<b>Refract Index</b>	<u>1.570/1.561</u>		
<b>Sign^</b>	<u>positive</u>		
<b>Extinction</b>	<u>parallel</u>		
<b>Birefringence</b>	<u>low</u>		
<b>Melt</b>	<u>no</u>		
<b>Fiber Name</b>	<u>Chrysotile</u>		

**ASBESTOS MINERALS**

**EST. VOL. %**

**Chrysotile**..... 0.01 to 0.10  
**Amosite**..... \_\_\_\_\_  
**Crocidolite**..... \_\_\_\_\_  
**Tremolite/Actinolite**..... \_\_\_\_\_  
**Anthophyllite**..... \_\_\_\_\_

**OTHER FIBROUS COMPONENTS**

**Talc -B/Y DS in 1.55** **\*\*\***  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**NON FIBROUS COMPONENTS**

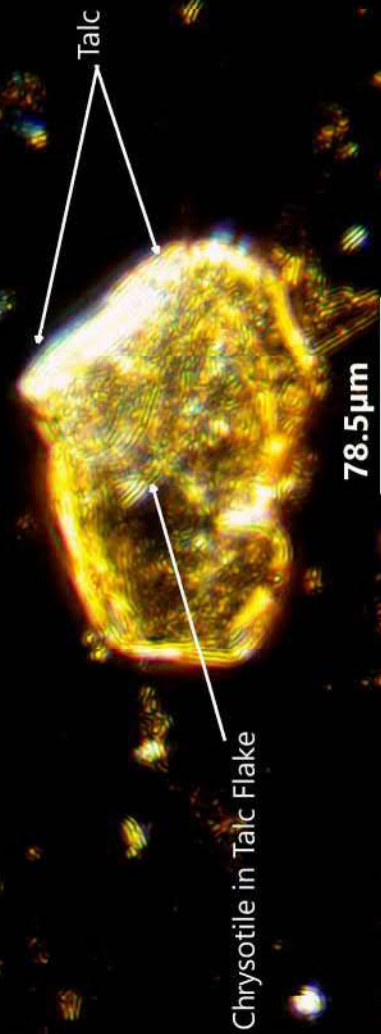
**Opagues** X  
**Talc** X  
**Mineral grains** X  
 \_\_\_\_\_

**Binder Description** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

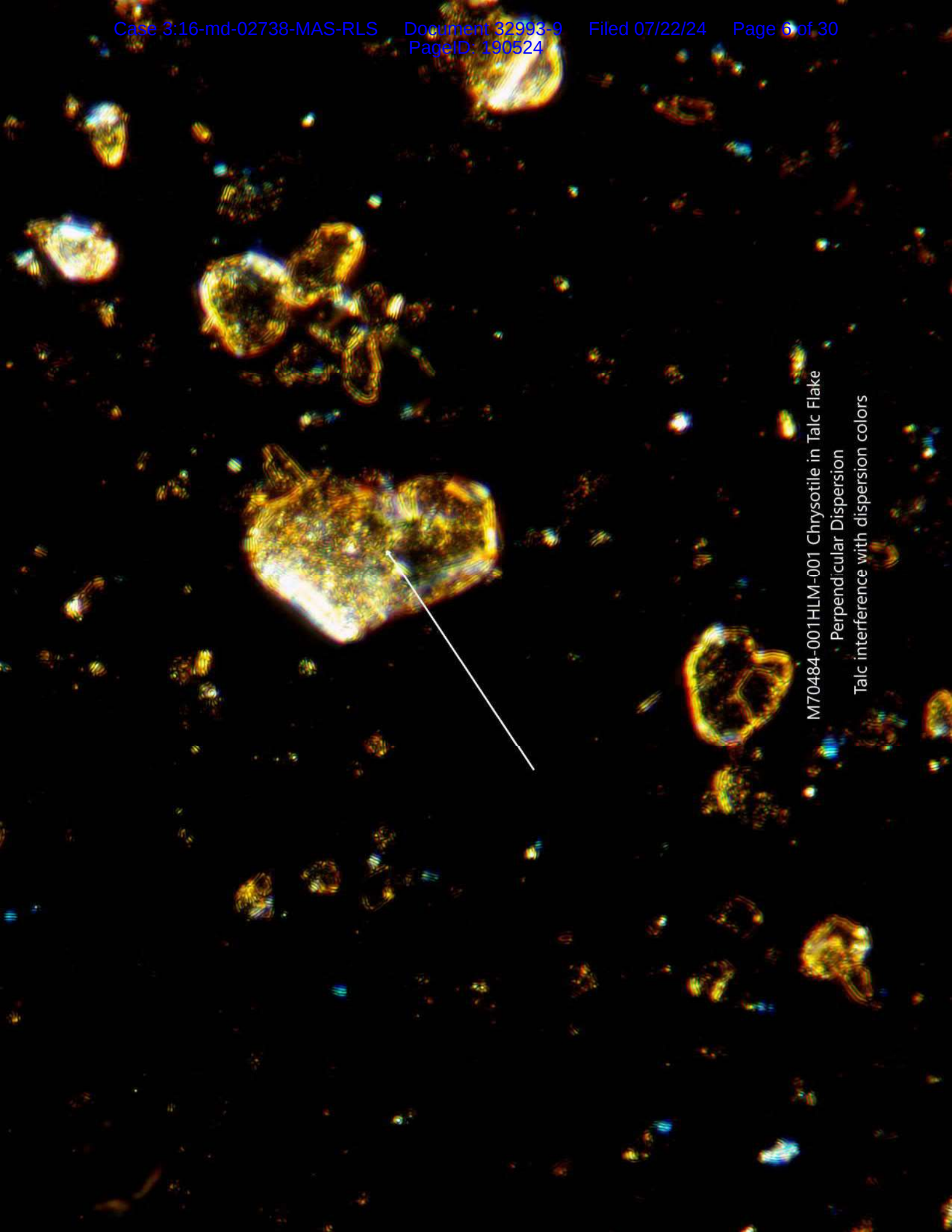
**Comments** Chrysotile asbestos observed. X = Materials detected. \*\*\* Modereate amount of Fibrous Talc observed.  
 \_\_\_\_\_

The method detection limit is 1% unless otherwise stated.





M70484-001HLM-001 Chrysotile in Talc Flake  
Parallel Dispersion 1.550 R.I. @ 100X  
Talc interference with Dispersion colors



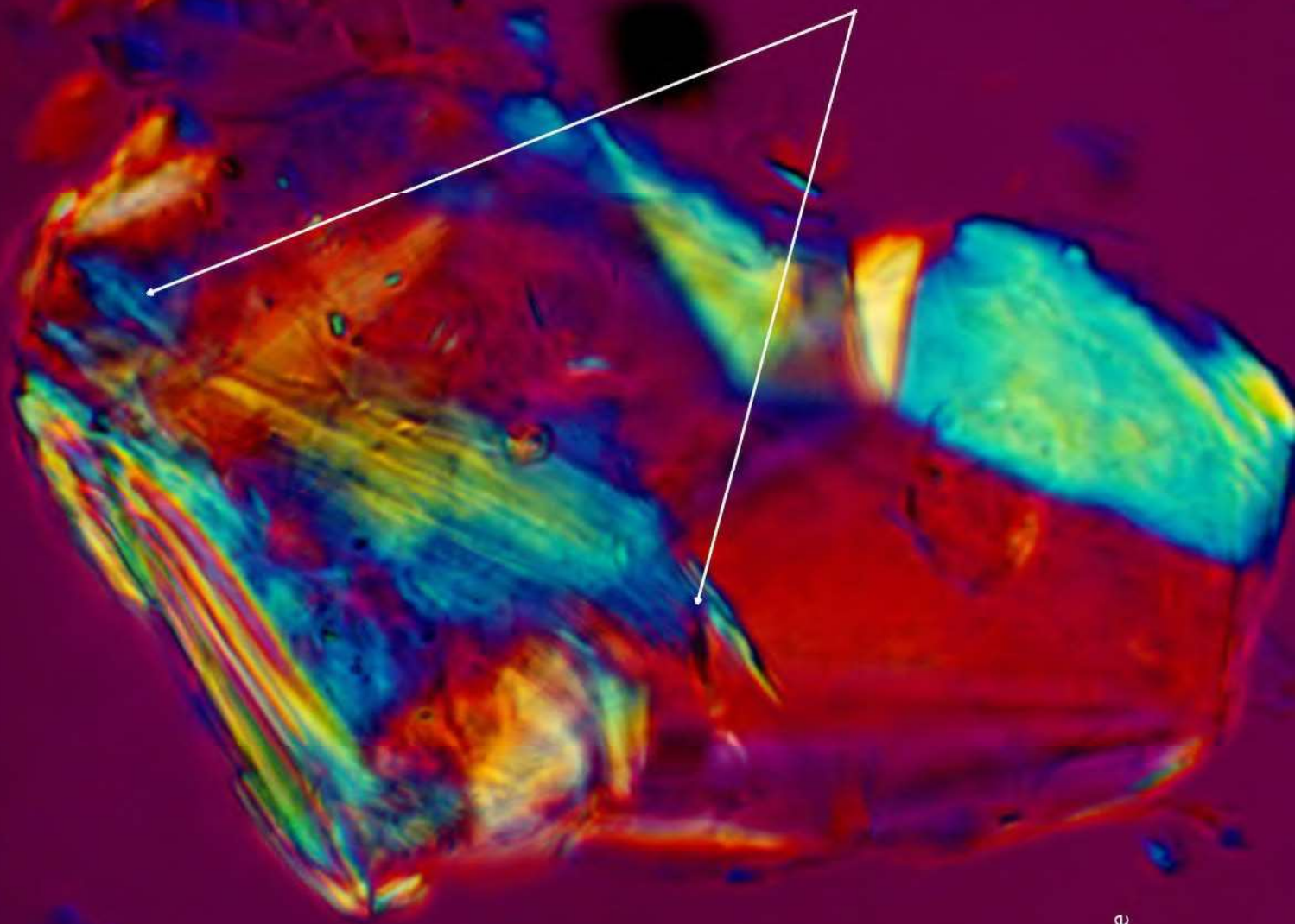
M70484-001HLM-001 Chrysotile in Talc Flake

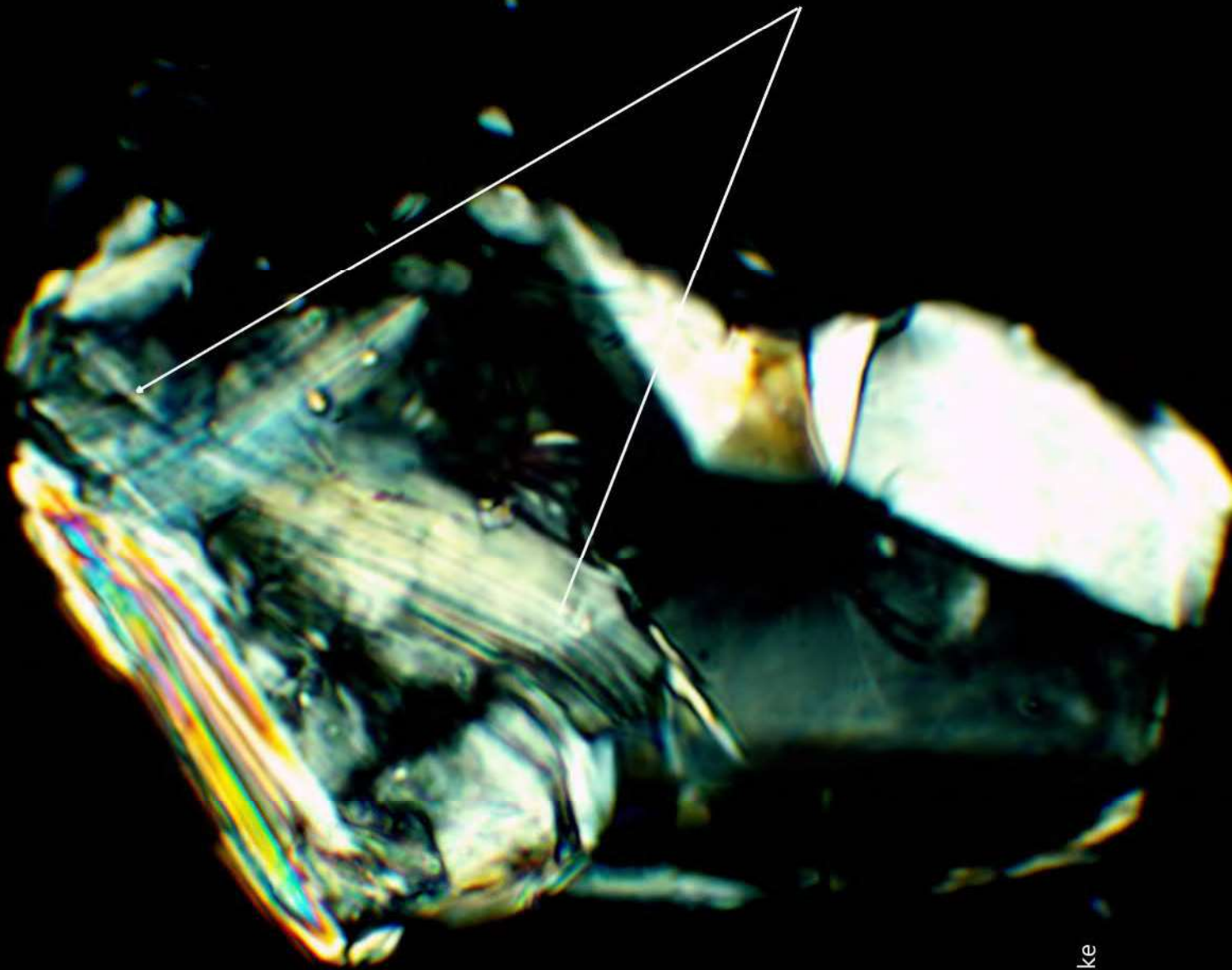
Perpendicular Dispersion

Talc interference with dispersion colors



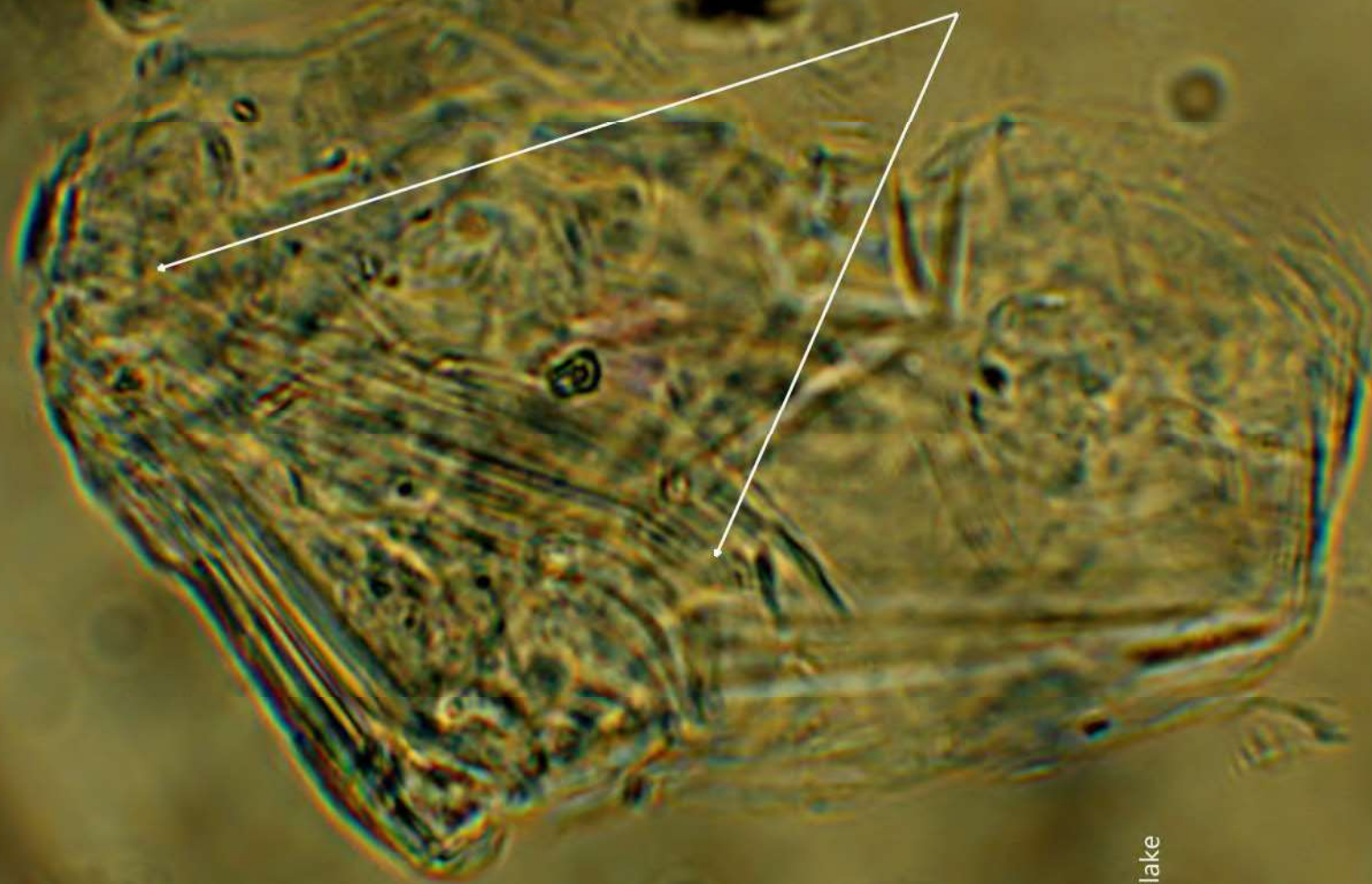
M70484-001HLM-001 Chrysotile in Talc Flake  
Elongation @ 400X





M70484-001HLM-001 Chrysotile in Talc Flake  
Crossed Polars



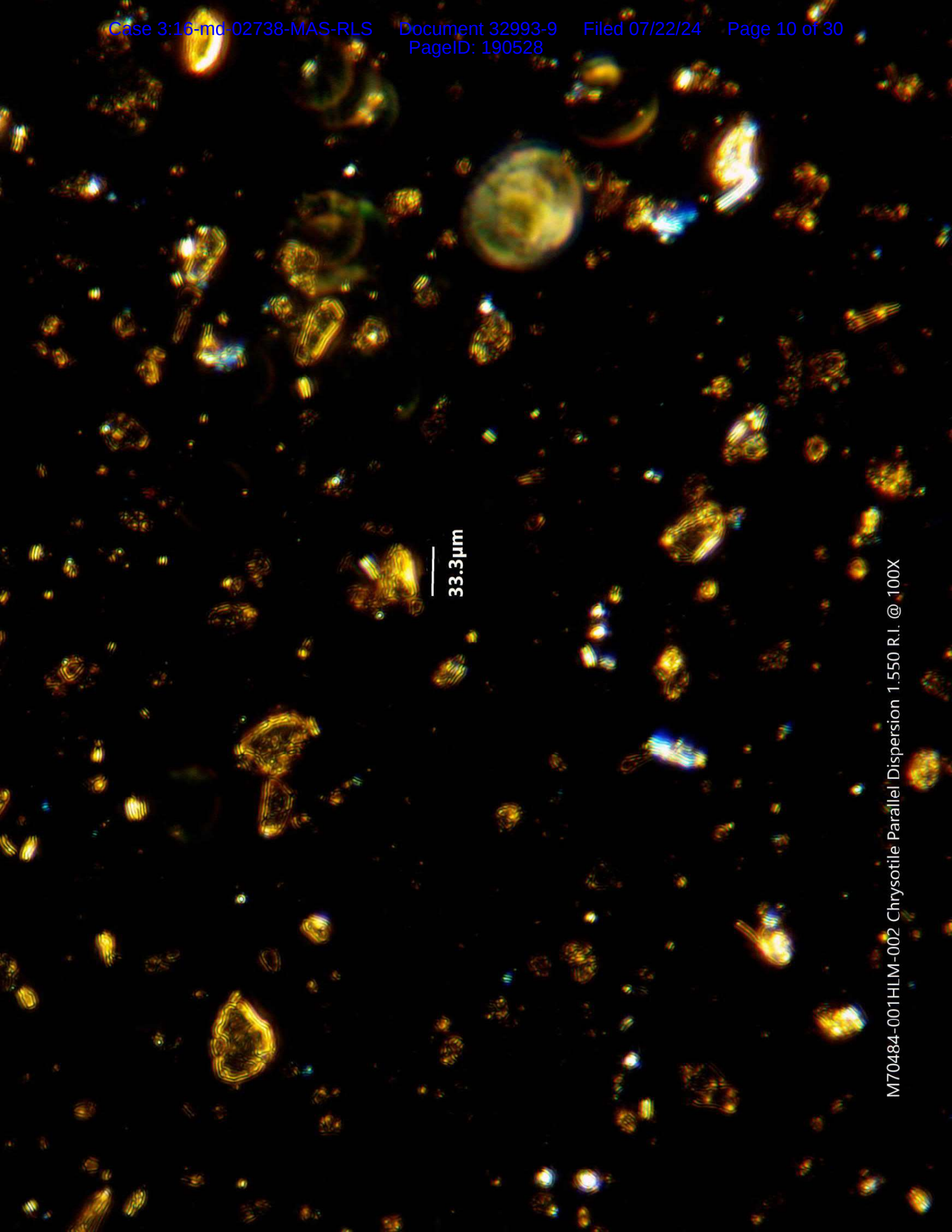


M70484-001HLM-001 Chrysotile in Talc Flake

Polarizer out

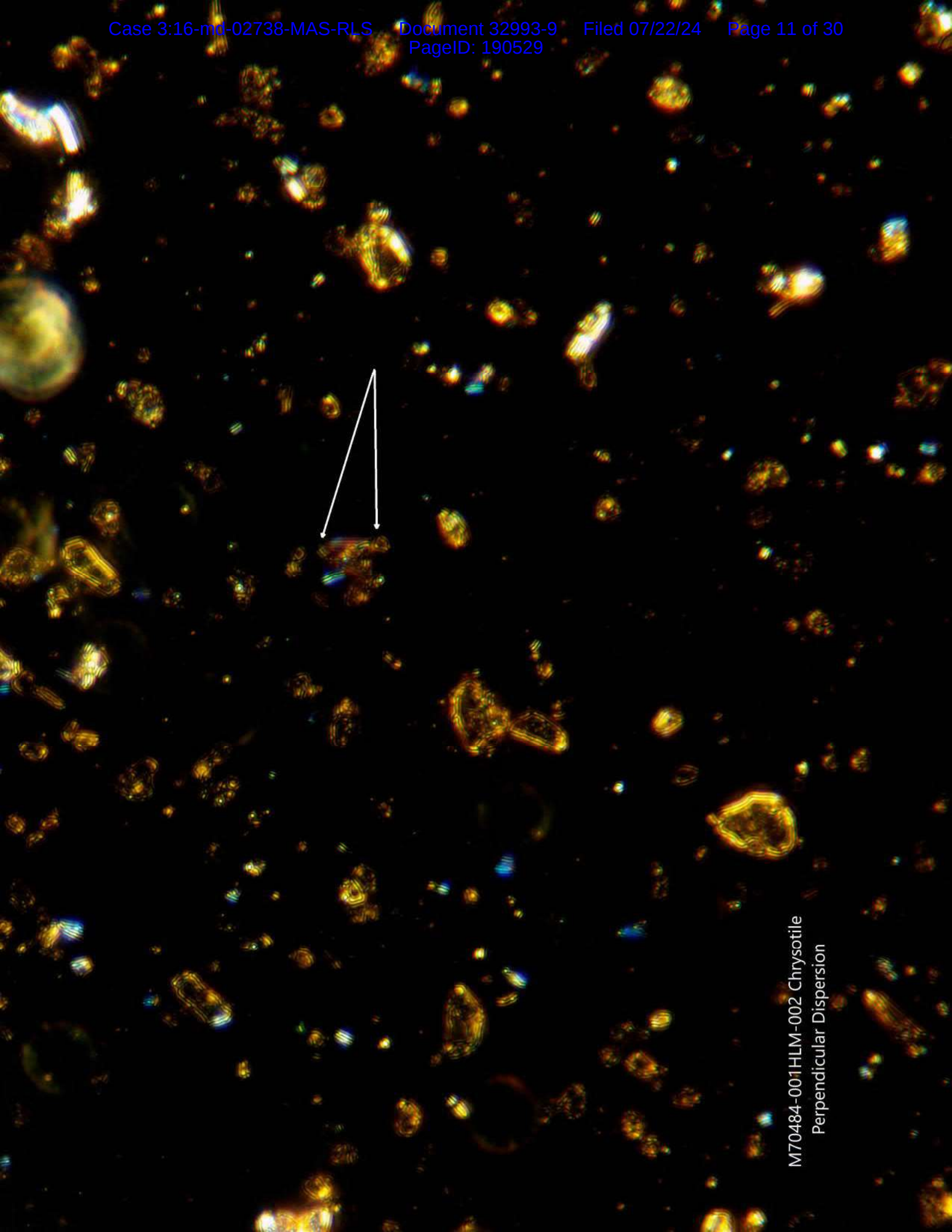
Aperture Diaphragm 95% closed

1.550 R.I. @ 400X



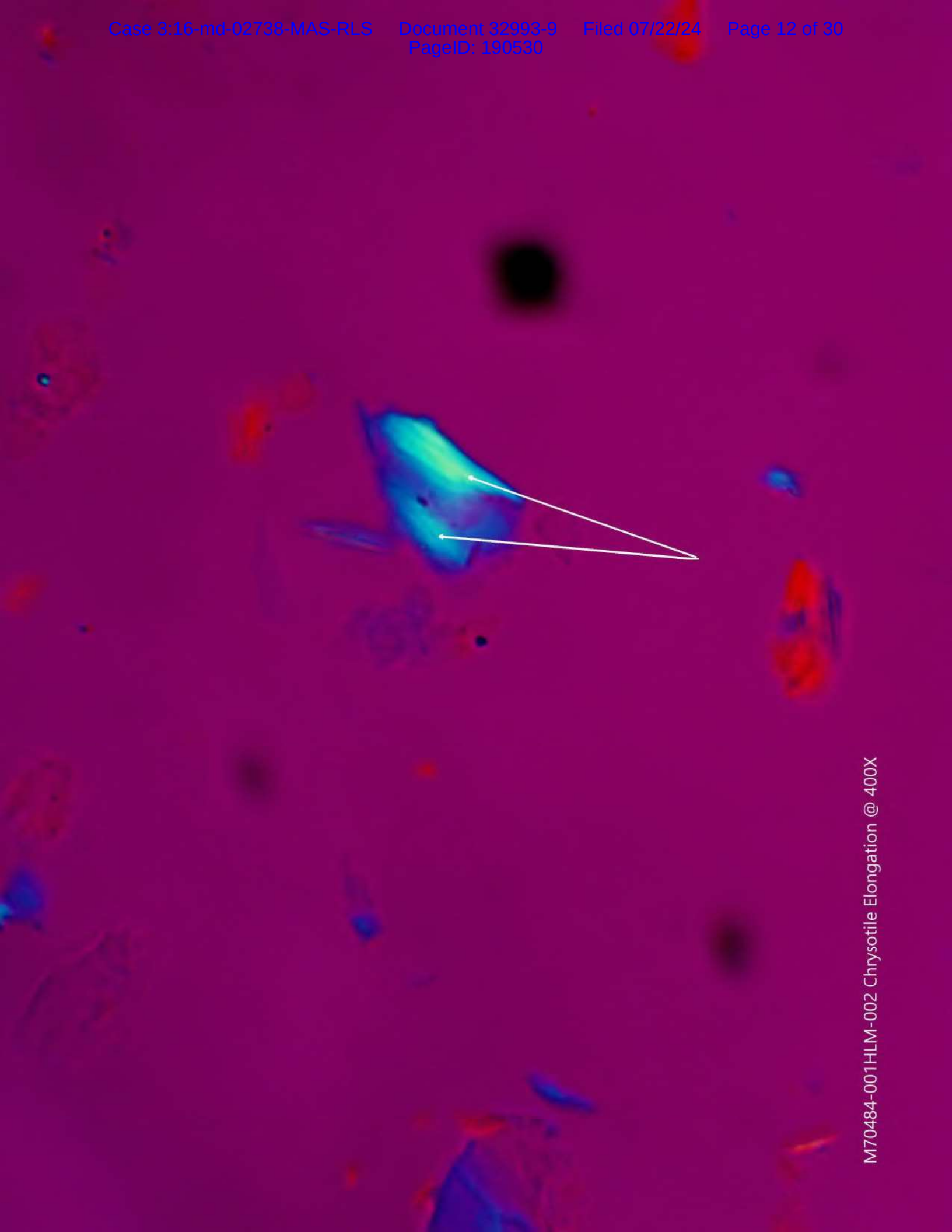
33.3 μm



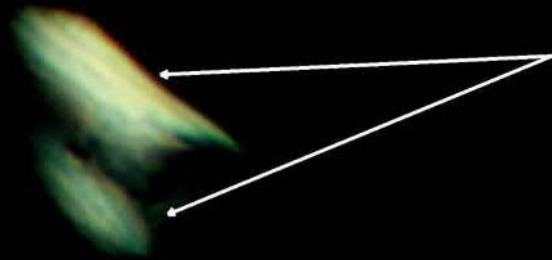


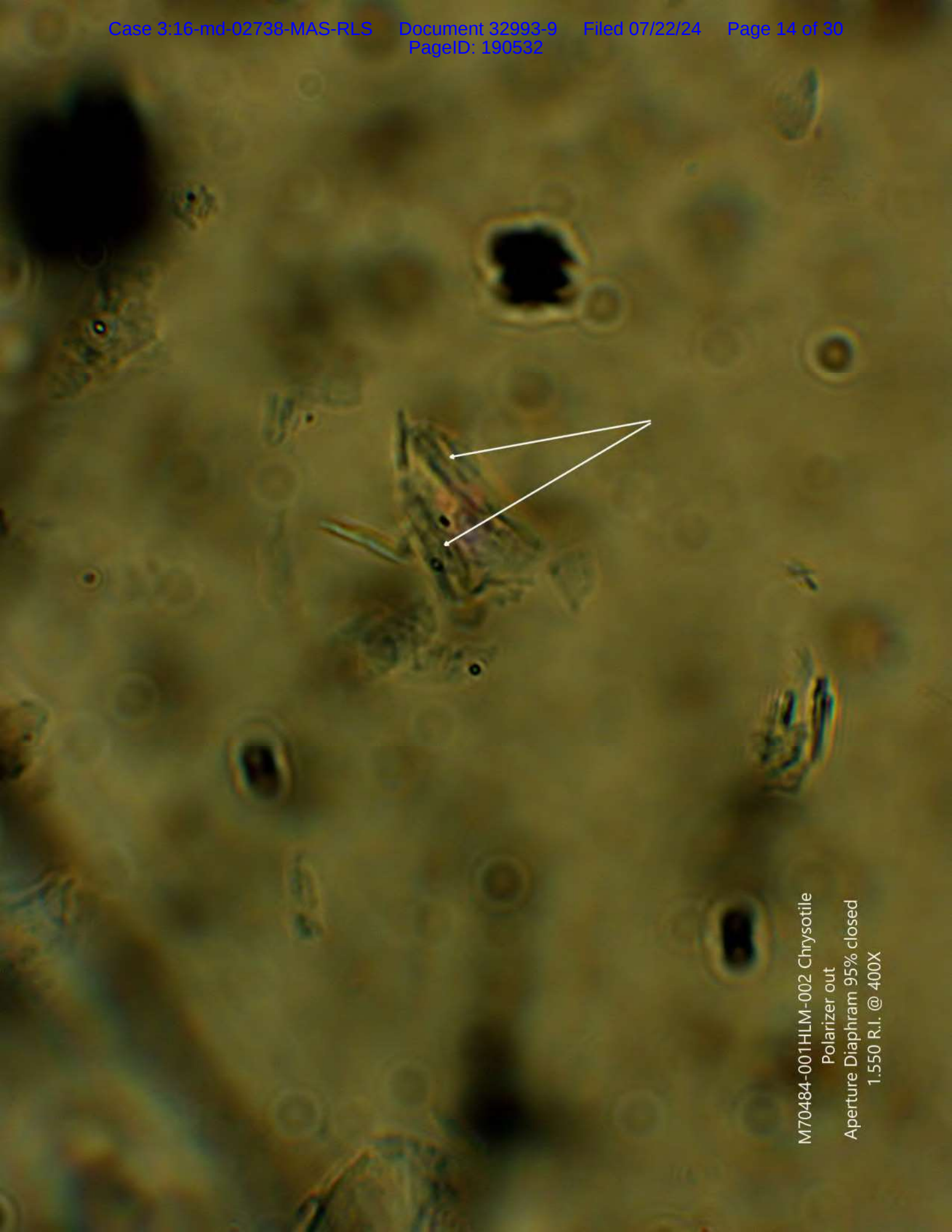
M70484-001HLM-002 Chrysotile  
Perpendicular Dispersion





M70484-001HLM-002 Chrysotile Elongation @ 400X





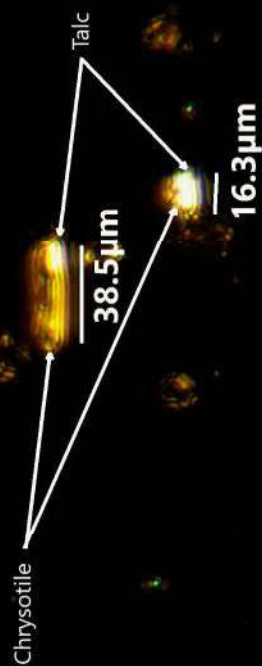
M70484-001HLM-002 Chrysotile

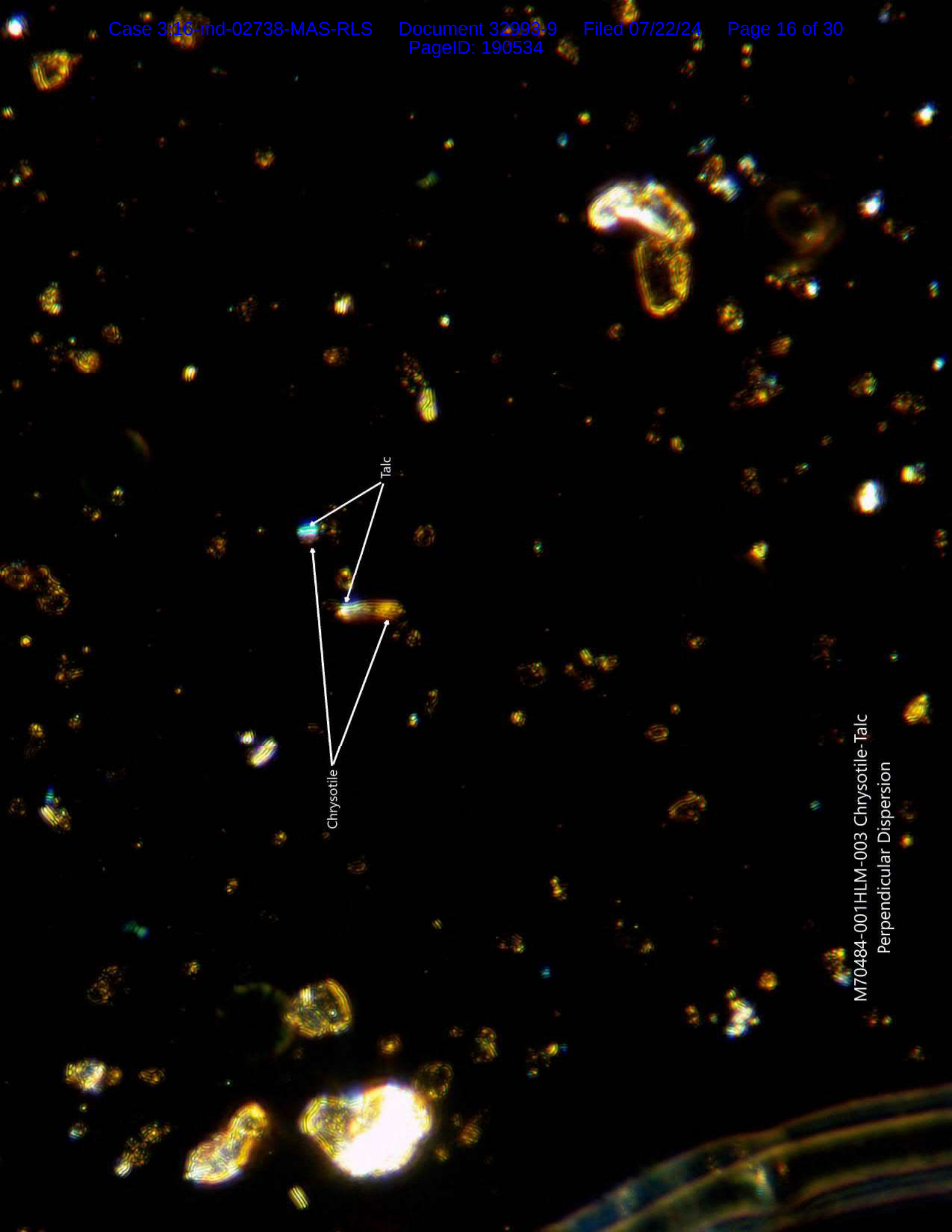
Polarizer out

Aperture Diaphragm 95% closed

1.550 R.I. @ 400X







Chrysotile

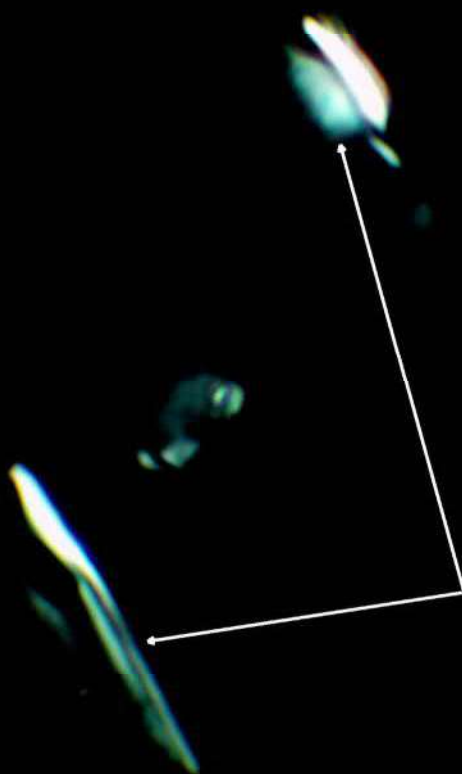
Talc

M70484-001HLM-003 Chrysotile-Talc  
Perpendicular Dispersion

Indications of very fine fibers

M70484-001HLM-003 Chrysotile - Talc Elongation @ 400X



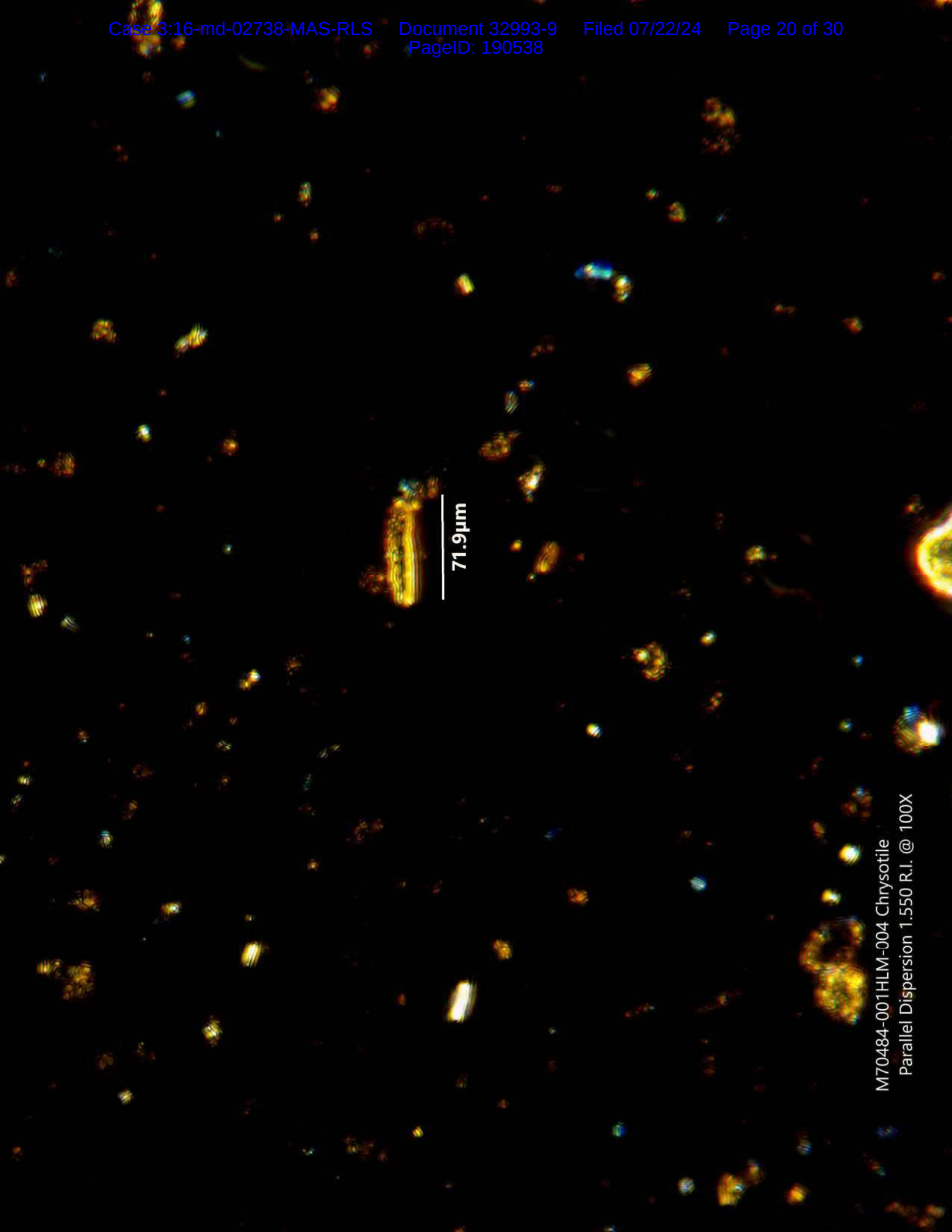


M70484-001HLM-003 Chrysotile - Talc Crossed Polars



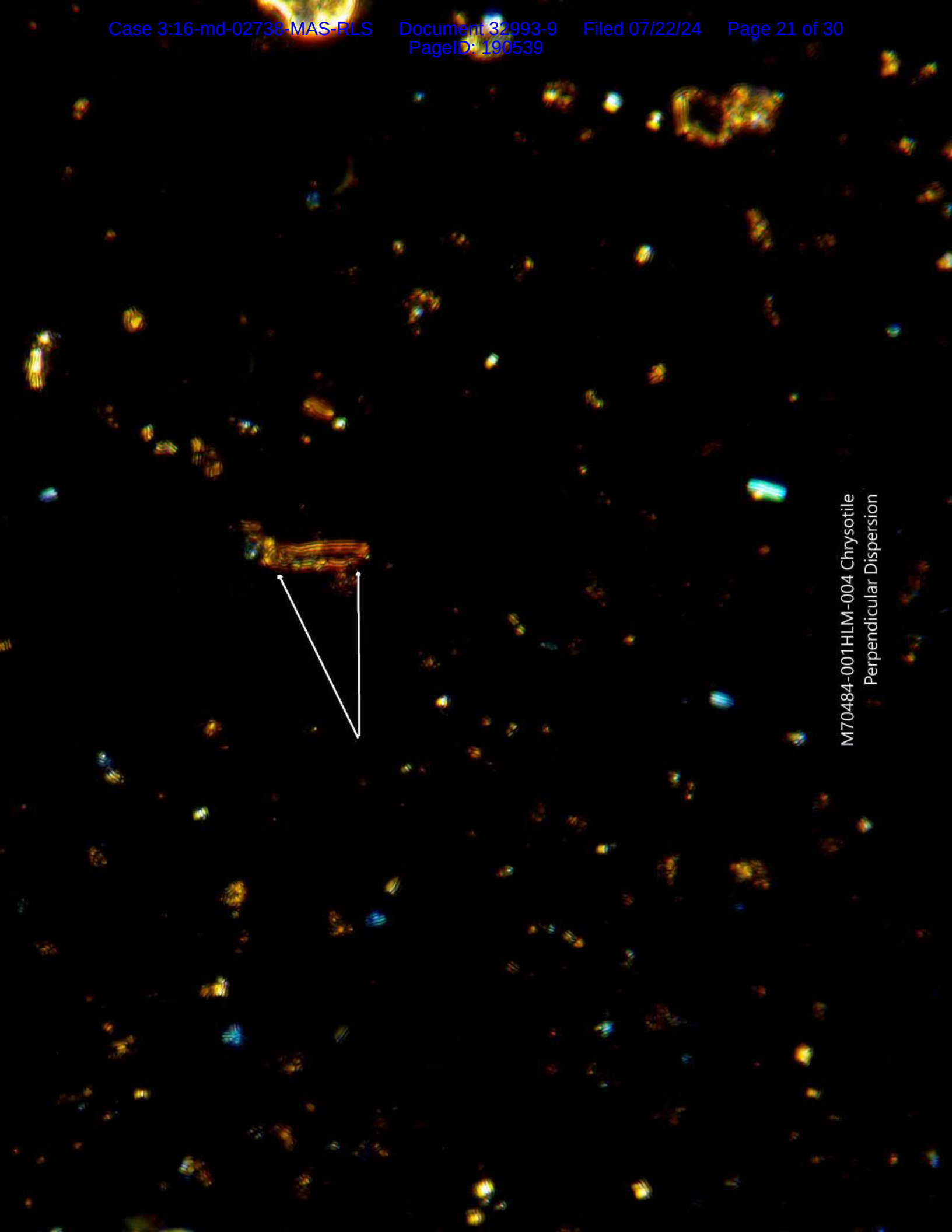
A polarized light micrograph showing several elongated, needle-shaped chrysotile fibers. The fibers exhibit characteristic double refraction, appearing as bright, elongated structures against a darker background. Three white arrows point to specific fibers: one points to a small, curved fiber at the top center, and two point to a larger, more elongated fiber in the lower left quadrant. The background is a light, yellowish-brown color with some smaller, less distinct particles.

M70484-001HLM-003 Chrysotile - Talc  
Polarizer out  
Aperture Diaphragm 95% closed  
1.550 R.I. @ 400X

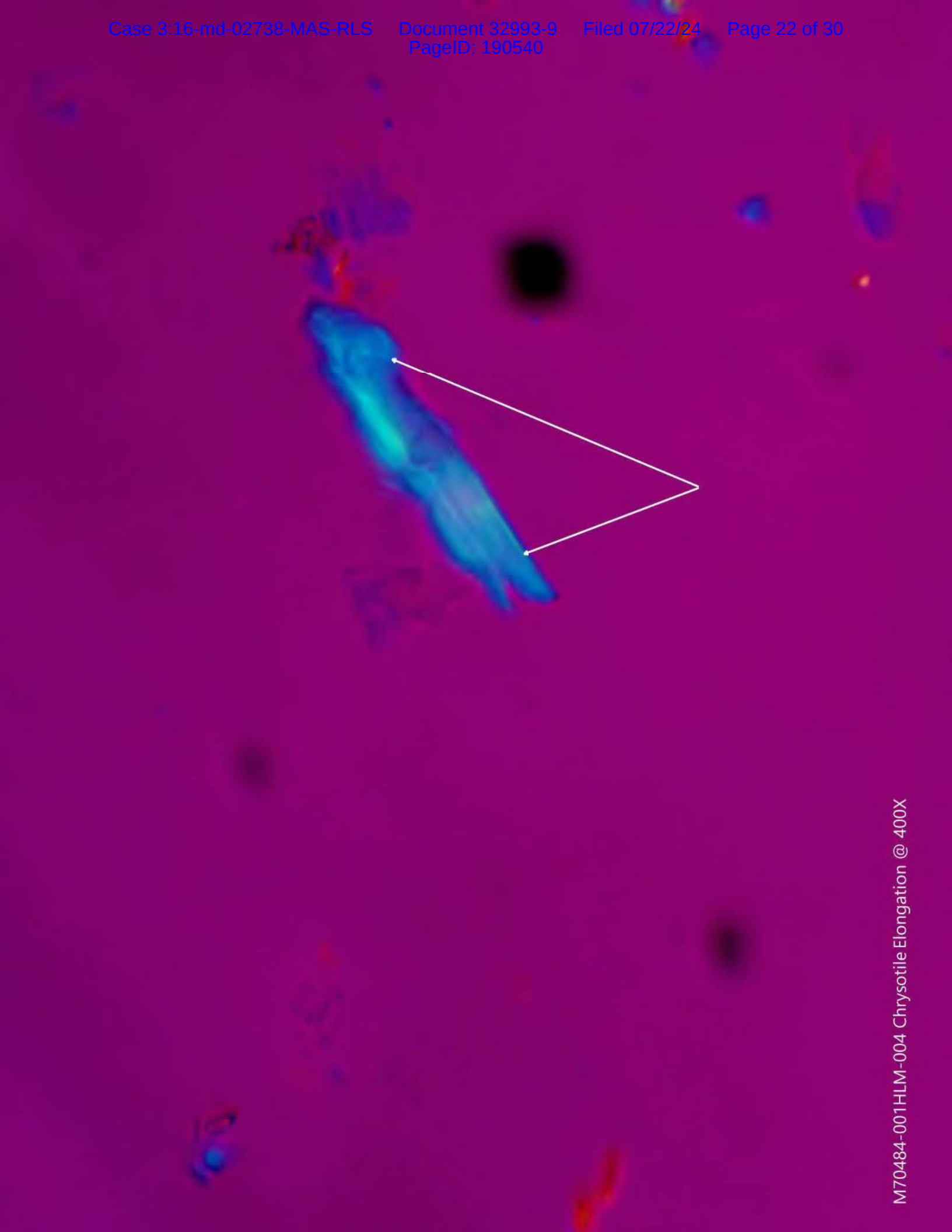


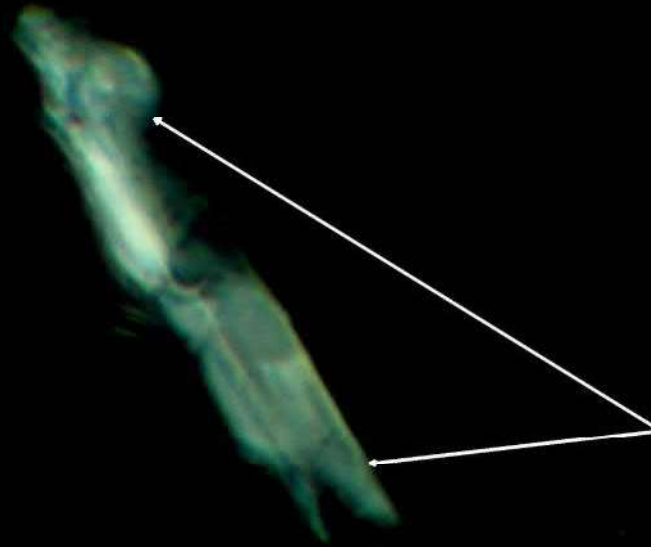
71.9μm

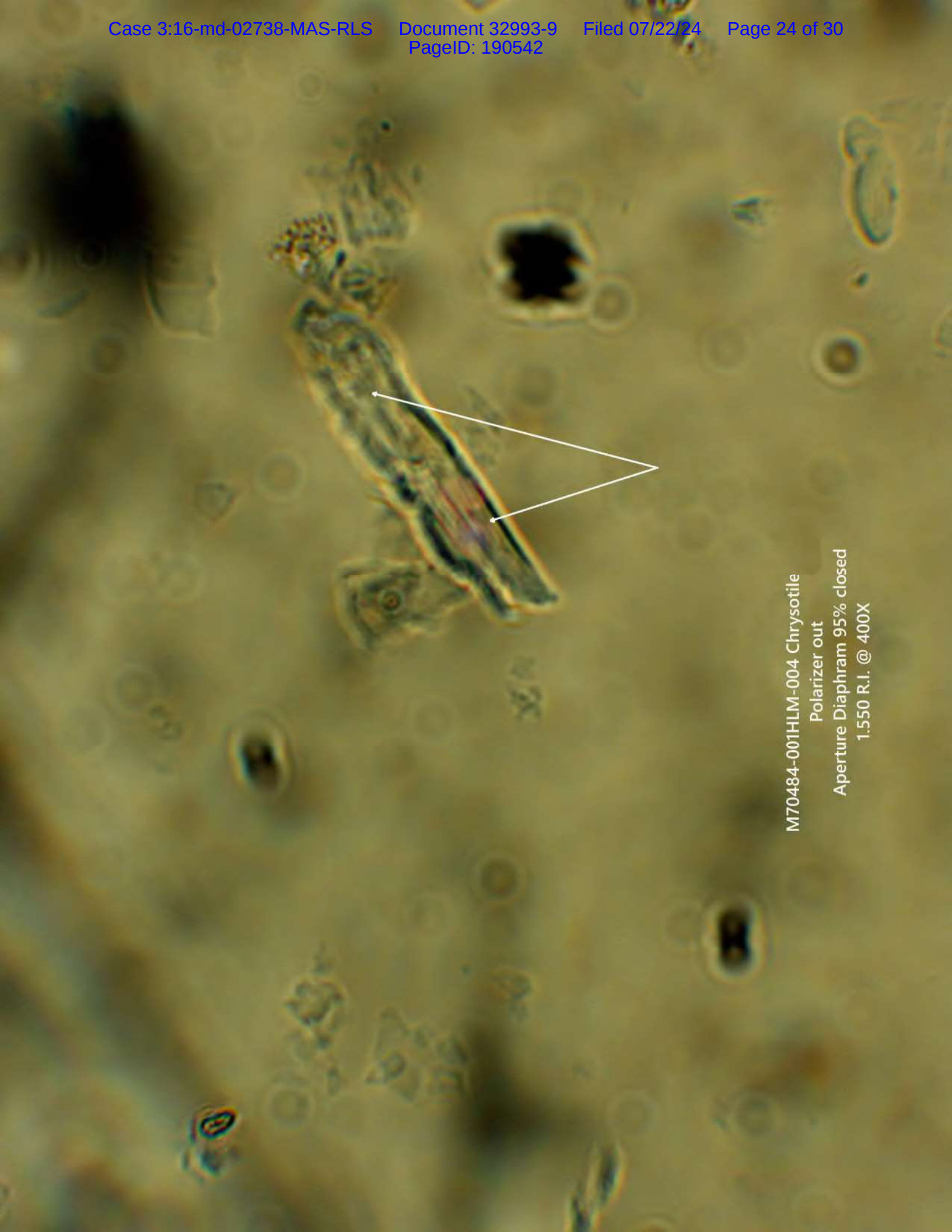




M70484-001HLM-004 Chrysotile  
Perpendicular Dispersion

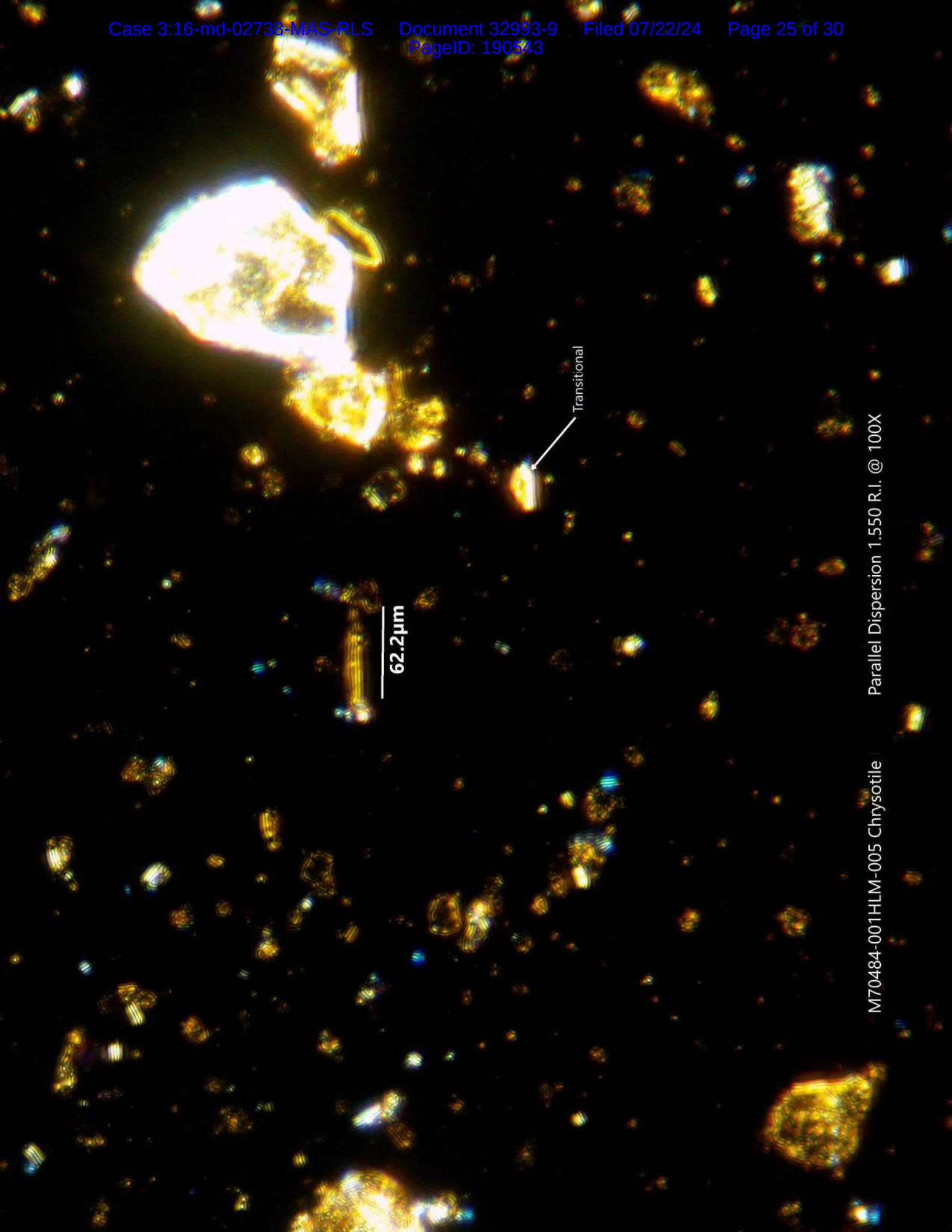






M70484-001HLM-004 Chrysotile  
Polarizer out  
Aperture Diaphragm 95% closed  
1.550 R.I. @ 400X



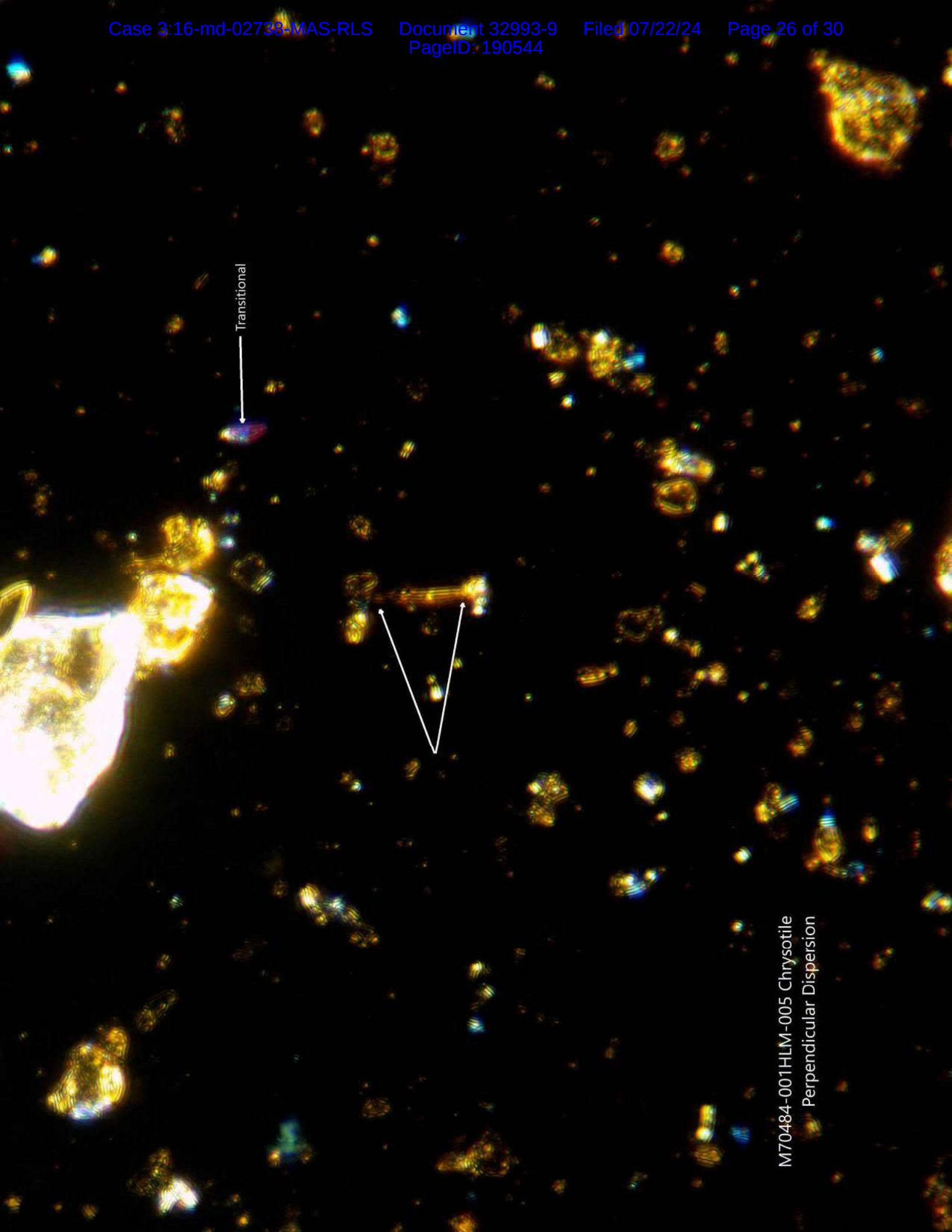


62.2μm

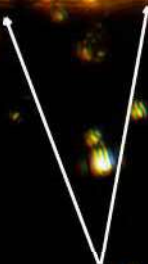
Transitional

Parallel Dispersion 1.550 R.I. @ 100X

M70484-001HLM-005 Chrysotile

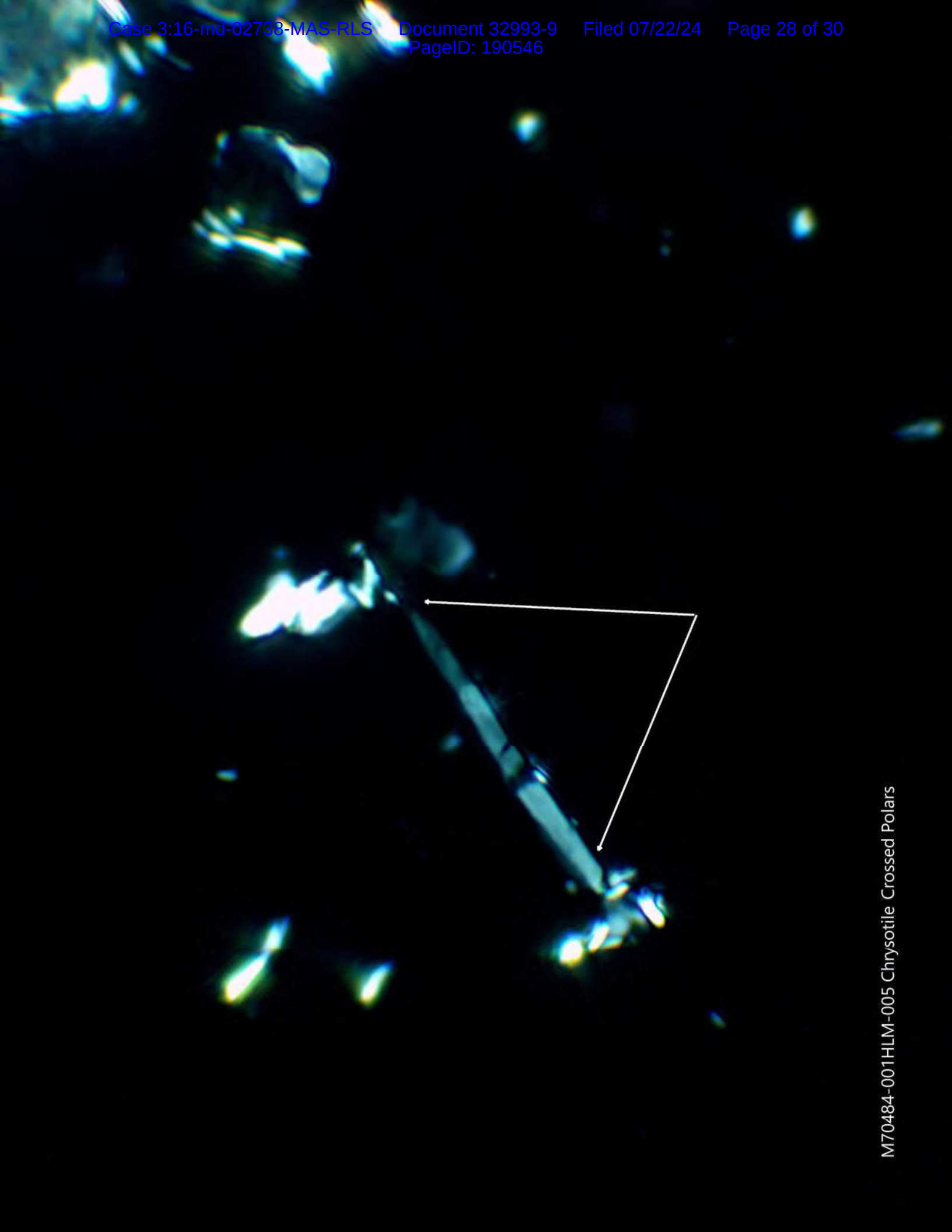


Transitional



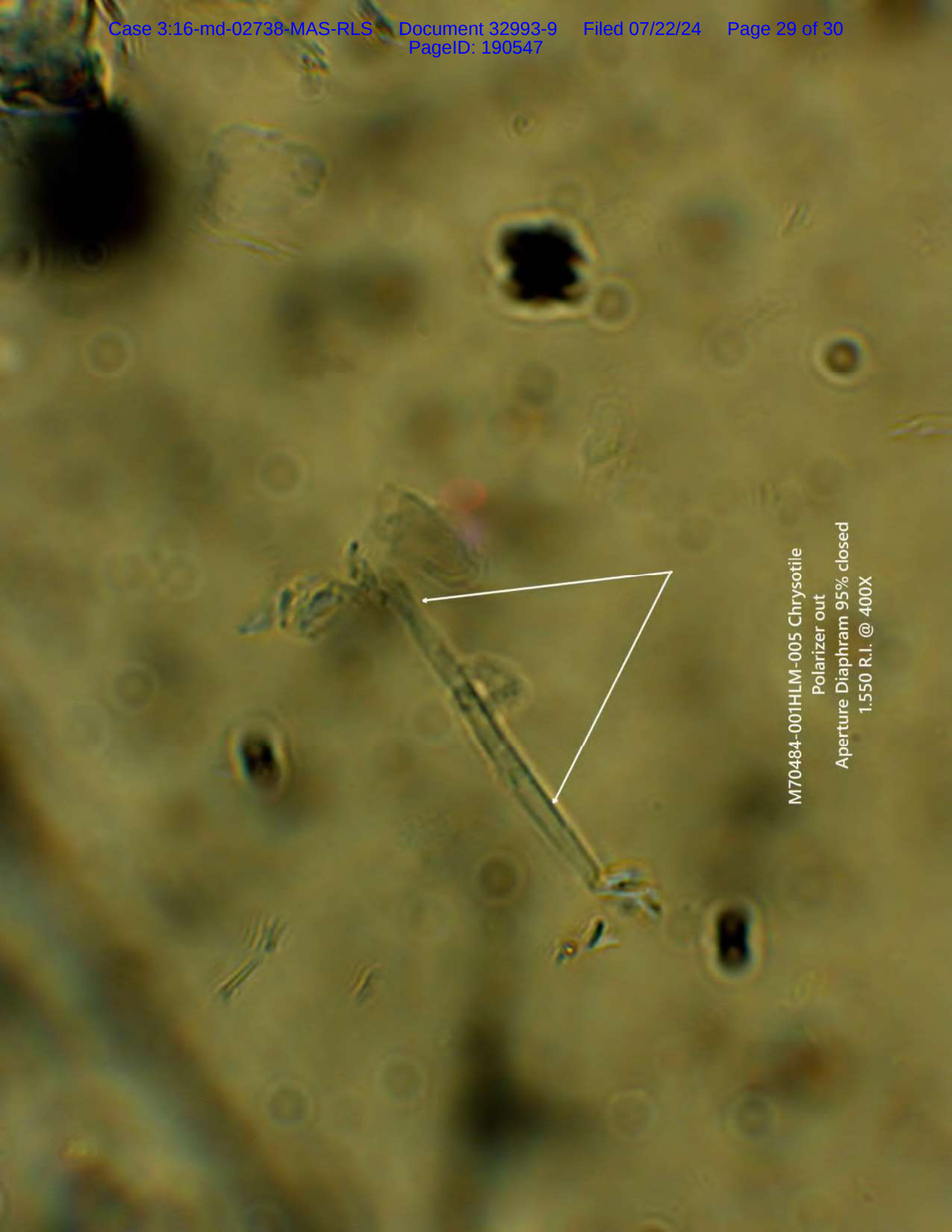
M70484-001HLM-005 Chrysotile  
Perpendicular Dispersion



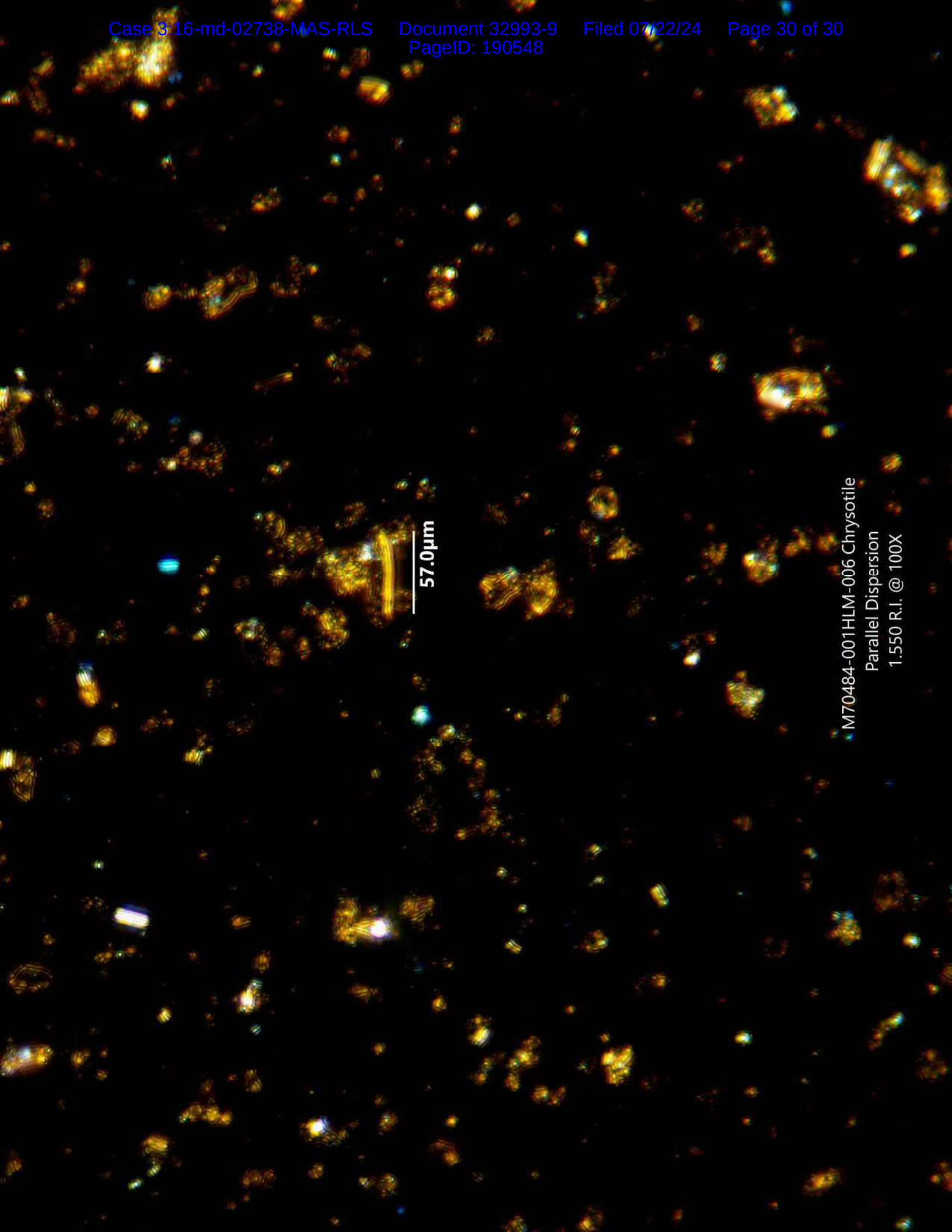


M70484-001HLM-005 Chrysotile Crossed Polars





M70484-001HLM-005 Chrysotile  
Polarizer out  
Aperture Diaphragm 95% closed  
1.550 R.I. @ 400X



57.0µm

M70484-001HLM-006 Chrysotile  
Parallel Dispersion  
1.550 R.I. @ 100X